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LISTING AND LABELING OF ELECTRICAL EQUIPMENT IN THE STATE OF MINNESOTA

Definition of "Equipment" as reprinted from Article 100 of the 2005 National Electrical Code©:

Equipment. A general term including material, fittings, devices, appliances, luminaires (fixtures), apparatus, and the like used as a part of, or in connection with, an electrical installation.

With a few exceptions, all electrical equipment installed anywhere in the State of Minnesota, including the City of Saint Paul, must be listed and labeled by a recognized testing laboratory. This means that this equipment will have the imprint (usually either stamped or an adhesive label) with the logo of the testing laboratory and other pertinent information on each piece of equipment. This label indicates that the equipment has been tested to a UL Standard for safety and quality. Although Underwriters Laboratories (UL) is the most recognizable label, there are many other testing laboratories who test and label electrical equipment. A "CE" label on a piece of equipment is <u>not</u> a testing laboratory mark and is not accepted as such. It is a mark used by manufacturers in Europe to self-certify their own equipment for Europe and is not accepted as a certification in North America.

The City of Saint Paul follows Minnesota State Law with regard to the listing and labeling of equipment used for electrical installations in the City. The requirements are excerpted from the Minnesota State Rules on the following pages.

Additional information on Minnesota Rules may be found on the Department of Labor and Industry's website at:

http://www.electricity.state.mn.us/

REQUIREMENTS FOR APPROVAL OF ELECTRICAL EQUIPMENT

MINNESOTA RULES PARTS 3800,3619 AND 3800,3620

3800.3619 **DEFINITIONS**.

- Subpart 1. Scope. For the purposes of part 3800.3620, the terms defined in this part have the meanings given them.
- Subpart 2. Labeled. "Labeled" has the meaning given in Article 100 of the National Electrical Code.
- Subpart 3. Listed. "Listed" has the meaning given in Article 100 of the National Electrical Code.
- Subpart 4. **National Electrical Code**. "National Electrical Code" means the National Electrical Code as incorporated by reference in part 1315.0200.
- Subpart 5. **Testing laboratory**. "Testing laboratory" means an electrical testing laboratory that has provided a written report to the board showing that it has the facilities listed in Section 90-6 of the National Electrical Code or that is accredited under the federal Occupational Safety and Health Administration Nationally Recognized Testing Laboratory program.

3800.3620 APPROVAL OF ELECTRICAL EQUIPMENT.

- Subpart 1. **National Standards**. Except as otherwise provided in subpart 2 or 3, as a condition for approval under Minnesota Statutes, section 326.243, and Section 110-2 of the National Electrical Code, all electrical equipment, including material, fittings, devices, apparatus, fixtures, appliances, and utilization equipment, used as part of, or in connection with, an electrical installation shall be listed and labeled by a testing laboratory.
- Subpart 2. **Alternatives to listing and labeling**. With the exception of electrical equipment of types specifically required to be listed by the National Electrical Code, the board shall accept one of the applicable methods described in item A or B as an alternative to listing and labeling.
- A. Evaluation by a testing laboratory or by a registered or licensed electrical engineer who has no financial or other interest in the manufacture or sale of the equipment, provided that any deficiencies identified by the evaluation are corrected and the equipment complies with the listed requirements. A written report of the evaluation shall be submitted directly to the board, and shall state standards that were applied in the evaluation. Evaluation reports by an electrical engineer acting independently of a testing laboratory shall also include an item-by-item comparison of the equipment with the requirements to be listed. If the board finds that the evaluation or evaluation report is incomplete or inaccurate it retains the right require further evidence of compliance or to reject the equipment.

Evaluations conducted according to the procedures in this item shall be considered evidence of compliance of all identical equipment produced by that manufacturer for a period of one year from the time the evaluation was completed, or until the equipment has been listed, whichever is less, provided that the manufacturer has applied for listing of the equipment, or produces fewer than 100 such units per year. Where additional identical equipment will be produced, the manufacturer shall provide the board with a written statement giving the equipment model number and agreeing that all subsequent equipment will be identical to that which was evaluated and, where the equipment has not been submitted for listing, shall also provide a written report to the board 12 months from the date of the evaluation report which lists the serial numbers of the equipment installed in Minnesota over the preceding twelve months.

Where deficiencies are identified by the initial evaluation report, those deficiencies shall be corrected for all subsequent units, the changes shall be verified by the person who performed the initial evaluation, and an amended report shall be submitted to the board. If the manufacturer deviates from the construction established by the evaluation report, the equipment shall be re-evaluated and any non-complying equipment that was sold brought into compliance.

Where the evidence of compliance is an evaluation according to this item, the manufacturer shall affix a durable permanent label to the equipment in a readily visible location, which states: "This equipment is identical to equipment that was evaluated by (name), and found to be in compliance with the requirements to be listed. A copy of the evaluation report was filed with the Minnesota State Board of Electricity on (date)."

B. Where procedures acceptable to the testing laboratory are followed, a manufacturer of unlisted equipment shall be permitted to submit such equipment to another manufacturer of similar listed equipment for evaluation, correction of non-complying construction, and labeling.

- Subpart 3. **Equipment exempt from listing requirements**. Equipment described in items A to E is exempt from the requirements in subparts 1 and 2.
- A. Industrial machinery as defined by Section 670-2 of the National Electrical Code is not required to be listed where all electrical components of the equipment, including electrical control panels and solid-state motor controls, are in compliance with item B, C, or D, or subpart 1 or 2, and all of the machine electrical wiring is in compliance with the National Electrical Code.
- B. Electrical equipment enclosed in a listed cabinet or box suitable for the environment in which it is installed, and electrically connected only to circuits supplied from listed Class 2, logic level, communications, or other circuits with maximum open circuit voltage of 30 volts rms AC, or DC, and overcurrent protection of eight amperes or less, or to any combination of such circuits, is not required to be listed, provided further that any printed wiring boards shall be of listed material and shall be permitted to be supplied from a labeled microcomputer power supply.
- C. Electrical control equipment constructed according to the listed requirements and enclosed in a listed cabinet or box suitable for the environment in which it is located, where the enclosed equipment consists of eight or fewer listed components, other than wires, cables, cords, terminal assemblies, non-electrical components, and those covered under item B, provided that the devices are not electrically connected to circuits on a printed wiring board other than those circuits covered under item B, is not required to be listed.
- D. Custom-made electrical equipment or related installations that are designed and manufactured to a purchaser's specifications and are not marketed to the general public are exempt from listing and labeling requirements. Equipment or installations exempt under this item are subject to the following:
- (1) they must be determined to be safe for their intended use by the manufacturer on the basis of test data which the purchaser keeps and makes available to the electrical inspection authority having jurisdiction, as required by Code of Federal Regulations, title 29, part 1910.399 (1991), for equipment or installations subject to national occupational safety and health laws; or
- (2) they must be inspected by the electrical inspection authority having jurisdiction for compliance with the construction requirements of the applicable electrical standards used by electrical testing laboratories to evaluate the equipment, or the National Electrical Code. Schematic wiring diagrams, component layout diagrams, and component electrical rating information shall be provided to enable evaluation under this sub item.
- E. Utilization equipment as defined by the National Electrical Code is not required to be listed if:
- (1) The equipment includes eight or fewer electrical components which are listed or are exempt from listing by item B or C; and
- (2) All wiring that is part of the equipment is in compliance with the National Electrical Code.